



# Material Safety Data Sheet

|                    |   |               |   |             |   |            |   |  |
|--------------------|---|---------------|---|-------------|---|------------|---|--|
| <p><b>NFPA</b></p> | <p><b>HMIS</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; font-weight: bold;">3</td> </tr> <tr> <td style="background-color: #FFCCCC;">Fire Hazard</td> <td style="text-align: center; font-weight: bold;">1</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; font-weight: bold;">0</td> </tr> </table> | Health Hazard | 3 | Fire Hazard | 1 | Reactivity | 0 | <p><b>Personal Protective Equipment</b></p> <p>See Section 15.</p> |
| Health Hazard      | 3   |               |   |             |   |            |   |  |
| Fire Hazard        | 1   |               |   |             |   |            |   |  |
| Reactivity         | 0   |               |   |             |   |            |   |  |

| Section 1. Chemical Product and Company Identification |  | Page Number: 1  |
|--|--|---|
| <b>Common Name/Trade Name</b>                          | Hydroxylamine sulfate  | <b>Catalog Number(s)</b> H1090  |
| <b>Manufacturer</b>                                    | SPECTRUM CHEMICAL MFG. CORP.<br>14422 S. SAN PEDRO STREET<br>GARDENA, CA 90248 | <b>CAS#</b> 10039-54-0  |
| <b>Commercial Name(s)</b>                              | Not available.   | <b>RTECS</b> NC5425000  |
| <b>Synonym</b>   | Not available.   | <b>TSCA</b> TSCA 8(b) inventory:<br>Hydroxylamine sulfate   |
| <b>Chemical Name</b>                                   |  | <b>CI#</b> Not available.   |
| <b>Chemical Family</b>                                 | Not available.   | <p style="text-align: center; margin: 0;"><b>IN CASE OF EMERGENCY</b></p> <p style="text-align: center; margin: 0;"><b>CHEMTREC (24hr) 800-424-9300</b></p> <p style="text-align: center; margin: 0;">CALL (310) 516-8000</p> |
| <b>Chemical Formula</b>                                | H8N2O6S  |   |
| <b>Supplier</b>  | SPECTRUM CHEMICAL MFG. CORP.<br>14422 S. SAN PEDRO STREET<br>GARDENA, CA 90248 |   |

| Section 2. Composition and Information on Ingredients |   |                          |                           |                           |             |
|---|---|--------------------------|---------------------------|---------------------------|-------------|
| Name  | CAS #   | Exposure Limits          |                           |                           | % by Weight |
|   |   | TWA (mg/m <sup>3</sup> ) | STEL (mg/m <sup>3</sup> ) | CEIL (mg/m <sup>3</sup> ) |             |
| 1) Hydroxylamine sulfate                              | 10039-54-0  |                          |                           |                           | 100         |
| <b>Toxicological Data on Ingredients</b>              | <p><b>Hydroxylamine sulfate</b><br/>LD50: Not available.<br/>LC50: Not available.</p> |                          |                           |                           |             |

| Section 3. Hazards Identification     |   |
|---------------------------------------|---|
| <b>Potential Acute Health Effects</b> | <p>Extremely hazardous in case of skin contact (corrosive, irritant), of eye contact (irritant), of ingestion, of inhalation. The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.</p> |

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|   |  |
|---|--|
| <b>Potential Chronic Health Effects</b> | Extremely hazardous in case of skin contact (corrosive, irritant), of eye contact (irritant), of ingestion, of inhalation.<br><b>CARCINOGENIC EFFECTS:</b> Not available.<br><b>MUTAGENIC EFFECTS:</b> Not available.<br><b>TERATOGENIC EFFECTS:</b> Not available.<br><b>DEVELOPMENTAL TOXICITY:</b> Not available.<br>The substance is toxic to lungs, mucous membranes.<br>Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. |
|---|--|

#### Section 4. First Aid Measures

|                             |  |
|-----------------------------|--|
| <b>Eye Contact</b>          | Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.  |
| <b>Skin Contact</b>         | If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical got on the victim's exposed skin, such as the hands : Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. If irritation persists, seek medical attention. Wash contaminated clothing before reusing. |
| <b>Serious Skin Contact</b> | Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.  |
| <b>Inhalation</b>           | Allow the victim to rest in a well ventilated area. Seek immediate medical attention.  |
| <b>Serious Inhalation</b>   | Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. <b>WARNING:</b> It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.  |
| <b>Ingestion</b>            | Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.  |
| <b>Serious Ingestion</b>    | Not available.   |

#### Section 5. Fire and Explosion Data

|  |   |
|--|---|
| <b>Flammability of the Product</b>                         | May be combustible at high temperature.   |
| <b>Auto-Ignition Temperature</b>                           | Not available.  |
| <b>Flash Points</b>  | Not available.  |
| <b>Flammable Limits</b>                                    | Not available.  |
| <b>Products of Combustion</b>                              | Not available.  |
| <b>Fire Hazards in Presence of Various Substances</b>      | Not available.  |
| <b>Explosion Hazards in Presence of Various Substances</b> | Risks of explosion of the product in presence of mechanical impact: Not available.<br>Risks of explosion of the product in presence of static discharge: Not available. |
| <b>Fire Fighting Media and Instructions</b>                | SMALL FIRE: Use DRY chemical powder.<br>LARGE FIRE: Use water spray, fog or foam. Do not use water jet.   |
| <b>Special Remarks on Fire Hazards</b>                     | Not available.  |
| <b>Special Remarks on Explosion Hazards</b>                | Not available.  |

**Section 6. Accidental Release Measures**

|                    |   |
|--------------------|---|
| <b>Small Spill</b> | Use appropriate tools to put the spilled solid in a convenient waste disposal container.  |
| <b>Large Spill</b> | Corrosive solid.<br>Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. |

**Section 7. Handling and Storage**

|                    |  |
|--------------------|--|
| <b>Precautions</b> | Keep container dry. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents. |
| <b>Storage</b>     | Keep container dry. Keep in a cool place. Ground all equipment containing material. Corrosive materials should be stored in a separate safety storage cabinet or room.   |

**Section 8. Exposure Controls/Personal Protection**

|   |   |
|---|---|
| <b>Engineering Controls</b>                         | Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. |
| <b>Personal Protection</b>                          | Splash goggles. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.  |
| <b>Personal Protection in Case of a Large Spill</b> | Splash goggles. Full suit. Vapor and dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.          |
| <b>Exposure Limits</b>                              | Not available.  |

**Section 9. Physical and Chemical Properties**

|                                      |   |              |                |
|--------------------------------------|---|--------------|----------------|
| <b>Physical state and appearance</b> | Solid. (Crystalline solid.)   | <b>Odor</b>  | Not available. |
| <b>Molecular Weight</b>              | 164.14 g/mole   | <b>Taste</b> | Not available. |
| <b>pH (1% soln/water)</b>            | Not available.  | <b>Color</b> | Colorless.     |
| <b>Boiling Point</b>                 | Not available.  |              |                |
| <b>Melting Point</b>                 | Decomposes. (170°C or 338°F)  |              |                |
| <b>Critical Temperature</b>          | Not available.  |              |                |
| <b>Specific Gravity</b>              | 1.67 (Water = 1)  |              |                |
| <b>Vapor Pressure</b>                | Not applicable.   |              |                |
| <b>Vapor Density</b>                 | Not available.  |              |                |
| <b>Volatility</b>                    | Not available.  |              |                |
| <b>Odor Threshold</b>                | Not available.  |              |                |
| <b>Water/Oil Dist. Coeff.</b>        | Not available.  |              |                |
| <b>Ionicity (in Water)</b>           | Not available.  |              |                |
| <b>Dispersion Properties</b>         | See solubility in water.  |              |                |
| <b>Solubility</b>                    | Easily soluble in cold water.<br>Very slightly soluble in methanol. |              |                |

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**Section 10. Stability and Reactivity Data**

|  |   |
|--|---|
| <b>Stability</b>                               | The product is stable.                                    |
| <b>Instability Temperature</b>                 | Not available.  |
| <b>Conditions of Instability</b>               | Not available.  |
| <b>Incompatibility with various substances</b> | Extremely reactive or incompatible with oxidizing agents. |
| <b>Corrosivity</b>                             | Non-corrosive in presence of glass.                       |
| <b>Special Remarks on Reactivity</b>           | Not available.  |
| <b>Special Remarks on Corrosivity</b>          | Not available.  |
| <b>Polymerization</b>                          | No.   |

**Section 11. Toxicological Information**

|   |   |
|---|---|
| <b>Routes of Entry</b>                                  | Eye contact. Inhalation. Ingestion.   |
| <b>Toxicity to Animals</b>                              | LD50: Not available.<br>LC50: Not available.  |
| <b>Chronic Effects on Humans</b>                        | The substance is toxic to lungs, mucous membranes.  |
| <b>Other Toxic Effects on Humans</b>                    | Extremely hazardous in case of skin contact (corrosive, irritant), of ingestion, of inhalation. |
| <b>Special Remarks on Toxicity to Animals</b>           | Not available.  |
| <b>Special Remarks on Chronic Effects on Humans</b>     | Not available.  |
| <b>Special Remarks on other Toxic Effects on Humans</b> | Not available.  |

**Section 12. Ecological Information**

|  |   |
|--|---|
| <b>Ecotoxicity</b>                                       | Not available.  |
| <b>BOD5 and COD</b>                                      | Not available.  |
| <b>Products of Biodegradation</b>                        | Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. |
| <b>Toxicity of the Products of Biodegradation</b>        | The products of degradation are more toxic.   |
| <b>Special Remarks on the Products of Biodegradation</b> | Not available.  |

**Section 13. Disposal Considerations**

Waste Disposal

**Section 14. Transport Information**

**DOT Classification** CLASS 8: Corrosive solid.

**Identification** : Hydroxylamine sulfate : UN2865 PG: III

**Special Provisions for Transport** Not available.

**DOT (Pictograms)**



**Section 15. Other Regulatory Information and Pictograms**

**Federal and State Regulations** TSCA 8(b) inventory: Hydroxylamine sulfate

**California Proposition 65 Warnings**

**Other Regulations** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications** **WHMIS (Canada)** CLASS D-2A: Material causing other toxic effects (VERY TOXIC). CLASS E: Corrosive solid.

**DSCL (EEC)** R35- Causes severe burns.

**HMIS (U.S.A.)**

|                     |   |
|---------------------|---|
| Health Hazard       | 3 |
| Fire Hazard         | 1 |
| Reactivity          | 0 |
| Personal Protection | j |

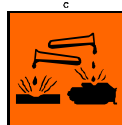
**National Fire Protection Association (U.S.A.)**

Health Flammability  
Reactivity  
Specific hazard

**WHMIS (Canada) (Pictograms)**



**DSCL (Europe) (Pictograms)**



**TDG (Canada) (Pictograms)**



ADR (Europe)  
(Pictograms)

## Protective Equipment



Gloves.



Synthetic apron.



Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Splash goggles.

## Section 16. Other Information

MSDS Code H3350

References Not available.

Other Special Considerations Not available.

Validated by Sonia Owen on 1/20/2003.

Verified by Sonia Owen.

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CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.